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CBRN Standards Development

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CBRN Standards Development

- Where We've Been:
 - March 1999 Workshop:
 - MOU's & IAA's:
 - SCBA Standard December, 2001:
- Where Are We Now:
 - SCBA Certification Implemented:
 - Full Facepiece APR Near Final:
 - Escape APR Early Development:
- Where Are We Going:
 - Timeline:



CBRN Standards Development

Task Name	2001	2002	2003	2004	2005
Gas Mask					
Escape Sets (APR)					
PAPR					
SCBA/APR combination					
SCBA (closed)					
Escape Set (SCBA)					
SAR					



CBRN Standards Development

- CBRN Development Approach
 - Hazard
 - Protection Technology
 - Human / Environmental Factors
 - Concept
 - Requirements
 - Testing / Validation
 - Quality Assurance
 - Open Review



CBRN Standards Development

CBRN Program Management:

- Milestones and Timelines
- Stakeholder Meetings and Discussions

CBRN Respirator Requirements

- Performance/Design Requirements
 - Performance Preferred
 - Design Where Required
 - Technical Integrity / Strong User Need



CBRN Standards Development

- CBRN Requirements
 - Logical/Consistent – Rationale
 - Sound Engineering / Scientific Principles
 - Consequence
 - Stretch Technology
 - Existing Respirators May Not Comply
 - Requirements within State of The Art



CBRN Standards Development

- Example: SCBA Standard
- 3 – Tier Approval
 - 42 CFR
 - NFPA 1981
 - New Requirements: LAT & LRPL
- Challenge Requirements:
 - Hazard Modeling
 - Safety Factor
 - State of Art Technology



CBRN Standards Development

- Example: APR
- 3 - Tier Approval
 - 42 CFR
 - Existing Standards
 - New Requirements
- Challenge Requirements:
 - IDLH Basis
 - Safety Factor
 - State of Art Technology



CBRN Standards Development

- CBRN APR Program Management:
 - Goal Statement: Develop a NIOSH, NPPTL, tight fitting, full facepiece, **air purifying respirator standard** that addresses CBRN materials identified as inhalation hazards and/or **possible terrorist hazards** using a **minimum number** of filters for **emergency responders**.



CBRN Standards Development

- CBRN APR Concept
 - High Priority User Issues
 - Multi Hazard Protections
 - Non-IDLH Use / Contingency Protection
 - High Flow: Physiological Demand
 - Live Agent Testing
 - Interoperability
 - Three Tier APR Standard
 - Requirements From 42 CFR
 - Requirements Based on Existing Standards
 - New Requirements – Special CBRN APR Requirements